
New Combinations in *Gnaphalium* (Asteraceae: Inuleae)

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ABSTRACT. Because of extensive morphological intermediacy, plants formerly distinguished at the species level as *Gnaphalium beneolens*, *G. microcephalum*, *G. thermale*, and *G. wrightii* are treated as intergrading races of the widespread *G. canescens*. The new combinations, *G. canescens* subsp. *beneolens*, *G. canescens* subsp. *microcephalum*, and *G. canescens* subsp. *thermale* are made.

In preparing the treatment of *Gnaphalium* L. for the forthcoming flora of California, *The Jepson Manual*, we have found that the species currently recognized as *G. beneolens* A. Davidson, *G. thermale* E. Nelson, *G. microcephalum* Nutt., and *G. wrightii* A. Gray intergrade to such a degree with respect to the characters used in current keys (Ferris, 1960; Munz, 1959, 1968, 1974) to differentiate them—decurent versus nondecurent leaf bases, nature of tomentum, character of capitulescence, size and shape of heads, and acute versus obtuse phyllary tips—that they cannot consistently be separated from each other. In addition, *G. wrightii* of easternmost California, Arizona, New Mexico, and northern Mexico is indistinguishable from *G. canescens* DC. of central Mexico. These entities are therefore all merged into a single polymorphic species, *G. canescens*. Recognizable geographic tendencies in variation are maintained as subspecies. The following new combinations are therefore proposed:

Gnaphalium canescens* DC. subsp. *beneolens
(A. Davidson) Stebbins & Keil, comb. nov. *Gnaphalium beneolens* A. Davidson, Bull. So. Calif. Acad. Sci. 17: 17. 1918.

Gnaphalium canescens* DC. subsp. *microcephalum (Nutt.) Stebbins & Keil, comb. nov. *Gnaphalium microcephalum* Nutt., Trans. Amer. Phil. Soc. n.s., 7: 404. 1841.

Gnaphalium canescens* DC. subsp. *thermale (E. Nelson) Stebbins & Keil, comb. nov. *Gnaphalium thermale* E. Nelson, Bot. Gaz. (Crawfordsville) 30: 121. 1900.

Gnaphalium canescens subsp. *canescens* (including *G. wrightii*) occurs from the southwestern United States to central Mexico. In the desert mountains of eastern California it grades into subspecies *microcephalum*, a race chiefly of southern California. This in turn grades into subspecies *beneolens* in the South Coast Ranges of California. Plants of the Sierra Nevada foothills are mostly assignable to subspecies *beneolens*, but above 1,000 m, plants agree more with subspecies *thermale*. The latter ranges eastward to the Rocky Mountains and northward to British Columbia. Descriptions of these taxa and their ranges are included in our treatment of *Gnaphalium* in *The Jepson Manual*.

Literature Cited

- Ferris, R. S. 1960. Compositae. Pp. 98-613 in L. Abrams & R. S. Ferris, *Illustrated Flora of the Pacific States*, vol 4. Stanford Univ. Press, Stanford.
- Munz, P. A. 1959. *A California Flora*. Univ. California Press, Berkeley.
- . 1968. *Supplement to A California Flora*. Univ. California Press, Berkeley.
- . 1974. *A Flora of Southern California*. Univ. California Press, Berkeley.